DESCRIPTION

The TCS12305A uses advanced trench technology to provide excellent $R_{DS(ON)}$, low gate charge and high density cell Design for ultra low on-resistance. This device is suitable for use as a load switch or in PWM applications.

GENERAL FEATURES

V_{DS} =-20V，I_D =-5.5A

$R_{DS(ON)}$(Typ.)=28mΩ @V_{GS}=-2.5V

$R_{DS(ON)}$(Typ.)=22mΩ @V_{GS}=-4.5V

High power and current handing capability

Lead free product is acquired

Surface mount package

APPLICATION

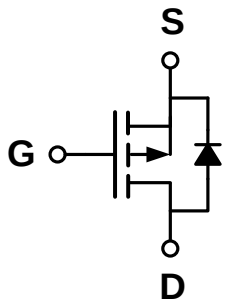
PWM applications

Load switch

PACKAGE

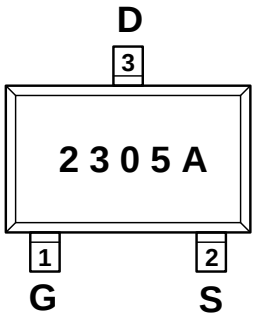
SOT-23

SCHEMATIC DIAGRAM



PIN ASSIGNMENT

SOT-23
(TOP VIEW)



ORDERING INFORMATION

Part Number	Storage Temperature	Package	Marking	Devices Per Reel
TCS12305A_ C	-55℃ to + 150℃	SOT-23	2305A	3000

ABSOLUTE MAXIMUM RATINGS

(TA=25℃ unless otherwise noted)

parameter		symbol	limit	unit
Drain-source voltage		V_{DS}	-20	V
Gate-source voltage		V_{GS}	±12	V
Continuous drain current (T_J = 150 ℃) [a]	T_A=25℃	I_D	-5.5	A
	T_A=70℃		-4.2	
Pulsed drain current [b]		I_{DM}	-22	
Continuous source current (diode conduction) [a]		I_S	-0.6	
Power dissipation [a]	T_A=25℃	P_D	0.72	W
	T_A=70℃		0.46	
Operating junction and storage temperature range		T_J, T_{stg}	-55—150	℃